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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/450,999 11/29/99 PORTER

J CELL-0086

HM12/0329

EXAMINER

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ART UNIT

PAPER NUMBER

1624

DATE MAILED:

03/29/00

*4*

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/450,999	PORTER ET AL.
	Examiner Beby Jayaram	Art Unit 1611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - a) All b) Some \* c) None of the CERTIFIED copies of the priority documents have been:
    1. received.
    2. received in Application No. (Series Code / Serial Number) \_\_\_\_\_.
    3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

#### Attachment(s)

- 14)  Notice of References Cited (PTO-892)
- 15)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3
- 17)  Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 18)  Notice of Informal Patent Application (PTO-152)
- 19)  Other: \_\_\_\_\_

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***DETAILED ACTION***

Claims 1-15 are pending in this application.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Following reasons apply:

1. In claim 1, line 9, "where R2.....group" is within the square bracket. Square brackets are intended to delete language in an application. The printer will not print the text between "[" and "]". Same problem was observed in lines 13-18, 23-26, 28-30, and 32-33. Correction is requested.

2. In claim 1, line 23, "in which" starts with a bracket, but does not end with a bracket. Correction is requested.

3. In claim 1, Ar<sup>2</sup> is defined as "heteroarylene". It is unclear which heteroatoms Applicants intend to be included in the group "heteroarylene". It is not clear whether heteroatoms are attached other molecules or not.

4. In claim 1, R<sup>1</sup> is defined as "heteroaliphatic", "cycloaliphatic", "polycycloaliphatic", "heterocycloaliphatic", "heteropolycycloaliphatic". An "aliphatic" group is an open chain carbon group. It is unclear which heteroatoms Applicants intend to be included in the group "heteroaliphatic." Nor is it known how many of these are present and how they are attached to the alkyl group. Are these supposed to be substituents or do they interrupt the chain? Are they

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directly linked to the rest of the molecule or are they not? Similarly, the terms "cycloaliphatic", "polycycloaliphatic", "heterocycloaliphatic", "heteropolycycloaliphatic" are unclear because one cannot say how many rings are present, what size rings are intended and the nature and number of heteroatoms present.

5. In claim 1, R3 is defined in terms of R3 itself (see for example R<sup>3</sup> as -NHC(O)OR<sup>3</sup>). This is a circular definition which is clearly improper. Appropriate correction is required.

6. The term 'derivative' in claim 1, in the definition of R, in page 58, line 2, is indefinite because one cannot say what the metes and bounds of this "derivative" is. Applicants need to say which derivatives are intended and which are not. One cannot say, for example, whether a methyl group intended or not. One skilled in the art cannot say for sure what Applicants intend and do not intend by this term.

7. The term "optionally substituted" is not understood. According to claim 1, "Optionally substituted" is with aromatic, heteroaromatic, aliphatic or heteroaliphatic. It is unclear what kinds of aromatic, heteroaromatic, aliphatic or heteroaliphatic groups are optionally substituted.

#### ***Claim Rejections***

Claims 1-15 are rejected on the ground of Judicially Created Doctrine as being drawn to an Improper Markush Group(s) *In re Hamisch*, 206 USPQ 300. The claimed compounds and compositions present a variable core and, thus, the Markush groups represented by the terms Ar<sup>1</sup>, Alk<sup>a</sup>, L<sup>1</sup>, Ar<sup>2</sup>, R<sup>1</sup>, R<sup>a</sup>, R<sup>a'</sup> and R render the claims clearly improper. It is considered that a Markush-type claim encompassing such species is directed to multiple independent and patentably distinct inventions when the species are

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so.unrelated and diverse that a reference anticipating the claims with regard to one of the species will not render obvious under 35 USC 103(a) with respect to another member. Furthermore, in this regard, lack of a common nucleus or core is evidentiary of independent and distinct inventions and also from the variably diverse definitions of  $Ar^1$ ,  $Alk^a$ ,  $L^1$ ,  $Ar^2$ ,  $R^1$ ,  $R^a$ ,  $R^{a'}$  and  $R$ . Each species can be considered to be patentably distinct from the other on the basis of its properties.

Deletion of non elected subject matter obviates this rejection.

Applicants election of single species i.e. Example 15 is acknowledged.

Accordingly, this application is examined to the extent wherein in compound (1),  $Ar^1$  is pyridine,  $Ar^2$  is 1, 4-phenylene,  $L^1$  is  $NH-C(O)$ ,  $r$  is 0,  $R$  is  $CO_2H$ ,  $R^1$  is  $NHCOR^3$  and  $R^a$  and  $R^{a'}$  are hydrogen.

$L^1$  is defined as  $CON(R^2)-$ ; but according to the elected species  $L^1$  should be  $NH-C(O)$ . Thus, the elected compound is not embraced by the generic formula (1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beby Jayaram, whose telephone number is (703) 308-7023. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

The fax number for this Group is (703) 308-4734 for "unofficial" purposes and the actual number for OFFICIAL business is 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

bj

*Mukund J. Shah*  
Mukund J. Shah  
Supervisory Patent Examiner  
Art Unit 1611